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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/714,370

11/14/2003

Sheri L. McGuire

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12/01/2006

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EXAMINER

STEELE, JENNIFER A

ART UNIT

PAPER NUMBER

1771

DATE MAILED: 12/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/714,370	MCGUIRE ET AL.	
	Examiner	Art Unit	
	Jennifer Steele	1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 September 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7,9-17,33 and 34 is/are pending in the application.
- 4a) Of the above claim(s) 8, 18-28 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 9/1/2006 has been entered.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claim 1-7, 9-17, 33 and 34 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. As amended the applicant claims low melt binder wherein said low melt binder is a bicomponent fiber in claims 10-17. The specification describes the bicomponent fibers, lists types known to those skilled in the art and refers to preferable ratios of low melt to high melt compositions. The specification states suitable bicomponent fiber with low melt to high melt ratio of 50/50 and then states the present invention contemplates a broader range. While the specification teaches a broad range of bicomponent fibers, the claims are indefinite as to what composition is employed in the invention.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
2. Claim 1-7, 9-17, 33, 34 rejected under 35 U.S.C. 103(a) as being unpatentable over Ogle (WO 01/68341) and further in view of Neogi (WO 90/11171). The current application teaches a nonwoven article comprising a low melt binder, synthetic and/or natural fiber coated with FR resin material and synthetic and/or natural fiber not coated with FR resin. The applicant teaches synthetic and/or natural fibers that are flame-retardant material and that the various FR fibers are well known to those skilled in the art (Claims 3, 4, 5 and 6 and specification pg 2). The applicant teaches FR resin and refers to a commercially suitable available FR resin by name as Guardex FR (specification pg 5). Applicant states that one skilled in the art "can pick and choose

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among them to find that which is most compatible". The current application teaches using low melt binders of bicomponent fibers, low melt polymer fibers and the types of polymer fibers employed (specification pg 7). The applicant teaches a flame-retardant fabric that can be employed in many applications as barrier layers between exterior fabric, inner stuffing of furniture, comforters, pillow and mattress with a batt of greater than 5 ounces per square yard.

Ogle teaches a fire resistant nonwoven batt comprising various blends of oxidized polyacrylonitrile (PAN) fibers, carrier fibers and binder fibers, wherein binder fibers have a relatively low melting temperature (claim 85) and carrier fibers have a high melting temperature. Ogle teaches employing synthetic and natural nonwoven fibers treated for fire resistance [0004]. Ogle's invention employs a blend of PAN fibers that are fire resistant, carrier fibers that are natural or synthetic fibers and low melt bicomponent binder fibers such as polyester core/copolyester sheath [0036,0037]. The ranges of blends employed are listed with resultant batt weights as shown in Tables I, II and III (pg 13-15). The batt weights range from 2.25 ounces per square yard to 108 ounces per square yard. Ogle's preferred embodiments include use within a mattress, a fire barrier layer in bedding, upholstery and vehicle and aircraft seats (col 29 lines 5-15). Ogle teaches blends of fire resistant fibers and non fire resistant fibers that produce a fire resistant fabric with the desired texture and feel of a non fire resistant fabric. By employing a low-melt binder, loft and durability is achieved to produce a fabric that can replace traditional fire retardant treated urethane foams and cotton batting. Ogle does not claim FR resin coated synthetic or natural fibers.

Neogi teaches fibers coated with a thermoplastic binder that can impart different properties on the fiber including fire resistance. Neogi teaches blending coated/treated fibers with non-coated/non-treated fibers and thermally bonding to produce a bonded web. (pg 7 line 13-22 and claim 35). Neogi differs from the current application because it does not teach synthetic fibers and Neogi does not teach producing a batt weight material.

The current application teaches a blend of 1.) FR resin coated synthetic or natural fibers with 2.) not FR coated synthetic or natural fibers thermally bonded by 3.) low-melt bicomponent binder fibers. Ogle teaches a flame resistant fabric produced from a blend of thermally bonded 1.) flame resistant fibers 2.) natural or synthetic carrier fibers and 3.) bicomponent binder fibers. Neogi teaches a fiber product that is a thermally bonded nonwoven web of comprised of 1.) coated and 2.) uncoated fibers wherein the coated fibers can be fire resistant. Ogle does not teach the FR coated fibers as the fire retardant fibers, but instead uses the PAN fibers. Neogi teaches that fire retardant fibers can be formed by coating fibers with a resin comprising fire retardant particles and that such fibers can be blended with other non coated, non fire retardant fibers. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have employed FR coated fibers as taught by Neogi either in place of the fire retardant fibers PAN fibers or in addition to the fire retardant PAN fibers in the blend of Ogle, motivated by the expectation that this would be an alternative, equivalent means of providing fire resistant fibers which could be blended with non fire resistant fibers and bonded to form a nonwoven fabric.

Double Patenting

3. Claims 1-7 and 9-17 and 33-34 remain provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-4,6-24 of copending Application No. 10/392999. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims are drawn to overlapping inventions. The amounts of each component would have been easily determined. New claims 33 and 34 are similarly rejected. This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Response to Arguments

Applicant's arguments with respect to claim 1-7, 9-17, 33, 34 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer Steele whose telephone number is (571) 272-7115. The examiner can normally be reached on Office Hours Mon-Fri 8AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (571) 272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


ELIZABETH M. COLE
PRIMARY EXAMINER

11/20/2006